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A budget workshop meeting of the City Commission was held on June 3, 2014 at 5:00 p.m. in the Commission Chamber at the Municipal Administration Building. The meeting was called to order by Mayor Eugene Fultz.

COMMISSIONERS PRESENT: Terrye Y. Howell; Betty Wojcik; Christopher C. Lutton; Mayor Fultz

**COMMISSIONERS ABSENT:** Jonathan Thornhill

**CITY REPRESENTATIVES PRESENT**: Kenneth Fields, City Manager; Clara VanBlargan, City Clerk; Jennifer Nanek, Deputy City Clerk; Albert C. Galloway, Jr., City Attorney

[Full staff memos are incorporated into the minutes. Meetings are recorded, but not transcribed verbatim.]

# Agenda Item 2. Preliminary Route Analysis – SR 60 W Utility Expansion, prepared by Kimley-Horn and Associates, Inc.

Tom Moran, Utilities Director, explained the workshop is to talk about extending utilities west along SR HWY 60 to support the CSX hub. Mr. Moran introduced representatives from Kimley-Horn & Associates, Lewis Bryant and Lisa Turner. Kenneth Fields, City Manager, explained that the project has been around for awhile and now needs to move forward as this will provide economic development possibilities for the City.

Lewis Bryant, Kimley-Horn & Associates, explained that they were asked to prepare a route analysis on extending Utilities west to the CSX railroad about 4.5 miles. Mr. Bryant gave a presentation on their analysis. The presentation included maps of the zoning of the Airport area and the HWY 60 Corridor as well as maps of the proposed routes.

## [Begin Presentation]

The City of Lake Wales (City) is proposing to expand the City's potable water, sanitary sewer, and reclaimed water service approximately 4.5 miles westerly along SR 60 W from US 27 to the limits of the City's service boundary. This utility expansion is to accommodate potential future development and existing customers along the SR 60 W corridor. Prior to preparing construction plans and permit applications for the utility expansion, the City requested Kimley-Horn and Associates, Inc. (Kimley-Horn) to conduct a route analysis to identify route alternatives, permitting requirements, demand estimates, and establish line sizes. This report presents the findings of the route analysis.

To determine future utility demands for the SR 60 W corridor, a service area was defined based on proximity to SR 60, parcel ownership, and geographic features. A map was shown of the SR 60 W service area. The SR 60 W service area encompasses approximately 2,652 acres. Approximately 812 acres of the service area is developed and approximately 1,840 acres is undeveloped. The existing development within this service area is primarily residential, commercial and light industrial. Most of the undeveloped land is located in the County with a future land use designation of "Rural Development Area" (RDA).

The existing development is composed primarily of residential, commercial, and industrial uses. These demands are presently served by well and septic systems. According to City Ordinance 2008- 42, "all persons or corporations living or doing business within the City utility service area shall be required to connect, when available, with the City utility system and shall be subject to all rules, regulations and rates provided by this chapter." The City will have the option to encourage existing customers to connect to the utility extensions once they are constructed.

Should the City decide to connect the existing developed parcels, their water and wastewater demands will need to be considered in sizing the distribution system. Historically, the City has used water demands of 122 gallons per day (gpd) per customer and 100 gpd for sewer. Given that the typical household size

in Lake Wales is 2.4 people (2010 Census), the demands from a typical residential unit can be defined as 292.8 gpd for water and 240 gpd for sewer. These typical residential unit demands can be used to convert uses other than residential (such as commercial and industrial) to common unit called an Equivalent Residential Unit (ERU). The following table presents the existing development water demands in common terms of ERU's.

The future demands for the SR 60 W corridor can be estimated from future land use maps. This method typically applies a utility demand per unit area of land use which can be reported as either demand in gallons per day or ERU equivalents. Approximately 1,840 acres of the 2,652 acre SR 60 W service area is undeveloped. Most of the undeveloped land is located in the County with a future land use designation of "Rural Development Area" (RDA). According to Section 2.180 of the Future Land Use element, the maximum density without land use amendments is 2 residential units per acre. The RDA does allow for some commercial and industrial uses as well within the RDA. Assuming the maximum density of 2 units is applied to the undeveloped area within the SR 60 W corridor, the maximum "full build out" density is calculated at 4,072 ERU.

The two route alternatives identified are based on field observations, property appraiser GIS data review, and discussions with existing utility owners and the Florida Department of Transportation (FDOT). No survey data were available for the analysis. Because of some congested conditions and limited right of way (ROW) along the SR 60 corridor, the final utility locations can only be determined with the use of survey data.

#### Water Route Alternative A

Water route alternative A consists of routing the proposed water main (WM) from the existing 12" WM on Mulberry Street, through the City cemetery, WWTF site, and the "Lightsey Easement" to the airport property. The WM would then continue north and west through the airport property eventually out to SR 60 at Airport Road. The WM would then cross SR 60 and continue along the northern SR 60 ROW to a terminal point near the CSX railroad crossing. The total length of alternative A is approximately 4.75 miles.

Water route alternative A.

Benefits – The following are benefits for water alternative A.

- The route will avoid construction along SR 60 which is congested and has limited ROW.
- No additional easements required from Mulberry St. to the airport (need to confirm with survey)

Detriments – The following are detriments for water alternative A.

- May still require utility and/or construction easements for the airport property and along SR 60 W from the airport to Godwin Road.
- Water alternative A route is approximately 0.75 miles longer than alternative B.
- Will require additional water main along SR 60 W to serve existing and future customers between the Airport Road and Henry Street.

Easements - The following easements may be required for water alternative A.

- Utility easement through the airport property
- Additional utility and construction easements may be needed based on the final survey and design.

Permits – The following permits will be required for alternative A.

- Polk County Health Department
- FDOT / Polk County Right of Way
- Florida Midland Railroad Crossing
- FDEP NPDES (NOI)

Special Studies – The following special studies will be required for Alternative A.

- Environmental Phase I (sand skinks)
- Sand Skink Coverboards & Mitigation (possible requirement)

Special Construction - The following special construction techniques may be required for Alternative A.

- Horizontal directional bore for SR 60, wetland and drainage canal crossings
- Jack and bore for railroad crossing.

Approximate Project Cost -12" WM \$2,300,000

#### Water Route Alternative B

Water route alternative B consists of routing the WM along the south side of the SR 60 W alignment from the connection point just west of Henry Street westward to the CSX railroad. A 6" service would be provided to the airport along Airport Road. To avoid congestion and limited ROW, the WM would cross SR 60 to the north at Airport road and then continue along the northern SR 60 W ROW to the terminal point at the CSX railroad crossing. The total length of Alternative B is approximately 4 miles.

Water route alternative B.

Benefits – The following are benefits for water alternative B.

- This route is approximately 0.75 miles shorter than Alternative A.
- Provides water service to customers along SR 60 W from Henry Street to Airport Road.

Detriments – The following are detriments for water alternative B.

- May require utility and/or construction easements from Henry Street to Godwin Road (survey required)
- May require horizontal directional drill construction along SR 60 W from Henry Street to Godwin Road.
- Will require a 6" water service to connect the airport.

Easements - The following easements may be required for Alternative B.

- Potential utility and/or construction easements needed from Henry Street to Godwin Street.
- Additional utility and construction easements may be needed based on final survey and design.

Permits – The following permits will be required for Alternative B.

- Polk County Health Department
- FDEP NPDES (NOI)
- FDOT/Polk County Right of Way
- Florida Midland Railroad Crossing

Special Studies – The following special studies will be required for Alternative B.

- Environmental Phase I (sand skinks)
- Sand Skink Coverboard and Mitigation(possible requirement)

Special Construction – The following special construction techniques may be required for Alternative B.

- Horizontal directional drill for SR 60 W from Henry Street to Godwin Street
- Horizontal directional drill for SR 60 W, wetlands, and drainage canal crossings
- Jack and bore for railroad crossing.

Approximate Project Cost -

• 12" WM - \$2,100,000 (includes \$100,000 for service to airport)

### Wastewater

Two route alternatives were considered for the SR 60 W service area. Both alternatives focused on providing a lift station and force main collection system to deliver wastewater to the City's wastewater treatment facility (WWTF) located just east of the City's airport. Local collection systems internal to future development were not considered as they should be designed to fit the specific developments. The wastewater collection system routes and pipe sizes are based on a final "full build-out" scenario. However, the collection system should be constructed in a phased approach to match expected development

In sizing sanitary sewer collection systems, the following parameters must be considered.

- Demands generated by the development.
- Force main velocity should be 2 ft/s or greater.
- Long collection systems with relatively low flows could create septic conditions resulting in odor issues
- Lift stations should be sized to produce minimum forcemain velocities and support peak demands.

Since no specific development is planned at this point and since only a generalized future land use plan is available, selecting the proper line size is problematic. On one hand, if a conservatively large diameter forcemain is constructed, meeting minimum flow velocities and preventing septic conditions will be difficult. On the other hand, selecting a forcemain diameter that is too small could result in not enough available capacity for large scale developments and/or the need to construct additional force mains in the near future.

## Wastewater Route Alternative A

Alternative A consists of routing the proposed forcemain (FM) from the WWTF westward through the "Lightsey Easement" to the airport property. The FM would then continue north and west through the airport property eventually out to SR 60 at Airport Road. The FM would then continue west along SR 60 to a terminal point near the CSX railroad crossing. Lift stations along the route would be determined as development plans are received. The total length of Alternative A is approximately 4.75 miles.

Benefits – The following are benefits for Alternative A.

- The route will avoid construction along SR 60 which is congested and has limited ROW.
- No additional easements required from Mulberry St. to the airport (need to confirm with survey)

Detriments – The following are detriments for Alternative A.

- May still require utility and/or construction easements for the airport property and along SR 60 W from the airport to Godwin Road.
- Route is approximately 0.25 miles longer than alternative B.
- Will require additional FM along SR 60 W to serve existing and future customers between the Airport Road and Henry Street.

Easements - The following easements may be required for alternative A.

- Utility easement through the airport property
- Additional utility and construction easements may be needed based on the final survey and design.

Permits – The following permits will be required for alternative A.

• Polk County Health Department

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- FDOT / Polk County Right of Way
- Florida Midland Railroad Crossing
- FDEP NPDES (NOI)
- Florida Midland Railroad Crossing

Special Studies – The following special studies will be required for Alternative A.

- Environmental Phase I (sand skinks)
- Sand Skink Coverboards & Mitigation (possible requirement)

Special Construction – The following special construction techniques may be required for Alternative A.

- Horizontal directional bore for SR 60, wetland and drainage canal crossings
- Jack and bore for railroad crossing.

Approximate Construction Cost - 6" FM \$1,600,000

#### Wastewater Route Alternative B

Alternative B consists of routing the proposed FM from the WWTF northward along Huey Street to SR 60. The FM would then continue west along SR 60 to a terminal point near the CSX railroad crossing. Lift stations along the route would be determined as development plans are received. The total length of Alternative B is approximately 4.5 miles.

Benefits – The following are benefits for alternative B.

- This route is approximately 0.25 miles shorter than Alternative A.
- Provides water service to customers along SR 60 W from Henry Street to Airport Road.

Detriments - The following are detriments for alternative B.

- May require utility and/or construction easements from Henry Street to Godwin Road (survey required)
- May require horizontal directional drill construction along SR 60 W from Henry Street to Godwin Road.
- Will require a service to connect the airport.

Easements - The following easements may be required for alternative B.

- Utility easement through the airport property
- Additional utility and construction easements may be needed based on the final design.

Permits – The following permits will be required for alternative B.

- Polk County Health Department
- FDEP NPDES (NOI)
- FDOT/Polk County Right of Way
- Florida Midland Railroad Crossing

Special Studies – The following special studies will be required for Alternative B.

- Environmental Phase I (sand skinks)
- Sand Skink Coverboard and Mitigation(possible requirement)

Special Construction – The following special construction techniques may be required for Alternative B.

- Horizontal directional bore for SR 60, wetland and drainage canal crossings
- Jack and bore for railroad crossing.

Approximate Project Cost -6" FM - \$1,500,000

[End Presentation]

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Regarding Reuse lines, Mr. Bryant presented recommendations for reuse lines but suggested waiting on reuse lines until we see the demand.

After the route is selected, the next step is to collect route survey data such as Right-of-Way information and needed easements. Mr. Bryant asked for the Commission's input.

Commissioner Wojcik asked if pipe sizes were based on the capacity of existing plants to provide those units. Mr. Bryant said they included the plant capacities in their models. As demand increases through larger lines then the plants will have to be upgraded. Commissioner Wojcik said the number of ERUs seems small. Deputy Mayor Lutton said the more industrial sites we have, the better capacity. Commissioner Wojcik said that is the goal. Kenneth Fields, City Manager, said we are looking to have warehousing and distribution, which are not heavy use but still need to have it. We need to serve that area otherwise Winter Haven will. This proposed plan puts us in place to take advantage of development that's forthcoming. Plan "A" gets us to the Airport quickly and there is currently a lot of interest in the Airport with forthcoming improvements. This will jump start economic development around the airport and along HWY 60.

Commissioner Wojcik asked what the pros and cons of the master planning in conjunction with the County as it takes a bit of time. Mr. Bryant said the City could work towards land use designations to enable certain use. Commissioner Wojcik asked what we have. Mr. Bryant said that the rural development area allows light industrial area. Deputy Mayor Lutton said if we annex an area then we can rezone or reclassify and we won't need the county's designation. The land use designations will change with specific requests as they come into the city. We can decide what to allow along that strip and be sure it is nothing ugly. Deputy Mayor Lutton suggested this route be compared with the Airport Master Plan and asked for clarification of where the Lightsey property. Mr. Moran showed on the map where the Lightsey property is located. Mr. Fields says that the route won't interfere with the plans at the Airport and will help with development there.

Deputy Mayor Lutton asked about getting across HWY 60 and wondered where and how. Would they service the north side of HWY 60? Mr. Bryant explained that the crossing would be a directional drill and will be at the Airport entrance.

Mr. Fields explained that there may be an interconnect at the railroad crossing with Winter Haven at some point. Like the interconnect at Lake Ashton it will provide a backup if something happens. Many are looking forward to developing further once there's an opportunity to connect. Deputy Mayor Lutton asked about the benefits of the interconnect. Albert C. Galloway, Jr., City Attorney, explained about the previous agreements. Mr. Fields explained that its available in case we lose service to the area. Commissioner Wojcik asked about Plan "A" and if needed can we go back east. Mr. Fields said if there is demand, yes. The most important thing is getting west of the airport.

Mayor Fultz said that Plan "A" is the best as there is interest in developing at the Airport. Mr. Bryant said getting out to the airport could happen quickly as the easements are there.

Commissioner Wojcik asked about the cost. Mr. Bryant said about \$3.9million including a 12" water line and a 6" force main. Mr. Fields explained that this will be additional \$2-\$3 monthly on the existing customer water bills. Commissioner Wojcik asked if this will be discussed in the budget. Mr. Fields said it will be and further explained as we get connection fees that cost will come down. Commissioner Wojcik asked if the new income will pay for the project. Mr. Fields said it would be hard to guess the demand. Commissioner Lutton said that other taxes would come in with new development as well. Commissioner Wojcik asked if we should look at if this project can pay for itself. Mr. Fields said we could do an economic analysis and see. Even if it cannot, the expansion is necessary for future development. Commissioner Wojcik asked if any of this will affect current customers. Mr. Fields responded that long-term on the supply side we should be okay.

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Commission members agreed that Plan "A" was the best and the 12" water line and a 6" force main. Mr. Fields said this can be upsized in the future and more details are forthcoming. He will keep the Commission apprised as we move forward.

The meeting was adjourned at 5:50 p.m.	
	Mayor/Deputy Mayor
ATTEST:	
City Clerk	